UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,902	02/13/2002	Gary N. Cherr	309T-300410US	1913

22798 7590 02/16/2006

QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C.
P O BOX 458
ALAMEDA, CA 94501

EXAMINER	
CHONG, YONG SOO	

ART UNIT	PAPER NUMBER
1617	

DATE MAILED: 02/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/076,902	CHERR ET AL.	
	Examiner	Art Unit	
	Yong S. Chong	1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 November 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35,37-39,41-43,45-49,51 and 53-55* is/are pending in the application.

4a) Of the above claim(s) *1-34,38,45-48 and 53-55* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *35,37,39,41-43,49 and 51* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/4/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Status of the Application

This Office Action is in response to applicant's arguments filed on 11/4/2005. Claims 1-35, 37-39, 41-43, 45-49, 51, 53-55 are pending. Claims 1-34, 38, 45-48, 53-55 have been withdrawn. Claims 35, 37, 39, 49, 51 have been amended. Claims 35, 37, 39, 41-43, 49, 51 are examined herein. Applicant's arguments have been fully considered and found persuasive to withdraw all rejections on record.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in Graham vs John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 35, 37, 39, 41-43, 49, 51 are rejected under 35 U.S.C. 103(a) as being obvious over Salinas et al. (In abstracts, 21st Annual Meeting of the Society of

Environmental Toxicology and Chemistry, Nashville, TN "Identification of cell surface domains for lignosulfonic acids derived from pulp mull effluent," Nov 2000) in view of Ward et al. (US Patent 4,185,097) and Anderson et al. (US Patent 6,063,773).

The instant claims are directed to a composition comprising at least one sulfonated compound, an excipient, spermicide, and a sperm from a mammal, human, canine, feline, or rodent.

Salinas et al. teach that breakdown products from lignin, specifically lignosulfonic acid (LSA), inhibit fertilization by binding to sperm domain head, thus preventing acrosome reaction. LSA also has the ability to inhibit the infectivity of the HIV virus (abstract). It is noted that lignin is known from a woody plant (see definition of lignin, specifically its ordinary and customary meaning provided by the American Heritage Dictionary, Second College Edition, 1982, pg. 730, of record; see also US Patent 5,698,524 abstract, of record).

Ward et al. teach that lignosulfonate (LSA) is useful for combating Herpes simplex viruses in animals (abstract).

Anderson et al. teach that known spermicide, nonoxynol-9, is known to be useful in a pharmaceutical composition for contraception or inhibiting fertilization (col. 1, lines 23-32. Suitable carriers and diluents may be combined with nonoxynol-9 (col. 3, lines 16-19). Anderson et al. also disclose that sexually transmitted diseases such as AIDS caused by HIV present a serious health risk. Therefore, it is important to develop a method, which provides protection against infectious microbes and unwanted pregnancies (col. 1, lines 38-44) in woman.

However, Salinas et al., Ward et al., and Anderson et al. fail to disclose a specific composition comprising LSA, spermicide, and sperm from mammals.

It would have been prima facie obvious to a person of ordinary skill in the art, at the time the claimed invention was made, to combine LSA and nonoxynol-9 with sperm from a mammal.

A person of ordinary skill in the art would have been motivated to make this combination because: (1) both Salinas et al. and Anderson et al. teach the inhibition of fertilization of LSA and nonoxynol-9, respectively, thus making the case for the art equivalence between the two compounds; (2) both Salinas et al. and Ward et al. teach that LSA combats sexually transmitted diseases such as HIV and Herpes, which is corroborated by the fact that Anderson et al. discloses the importance of protecting against sexually transmitted diseases when using contraception such as nonoxynol-9. Thus, it would be obvious to administer this contraceptive composition, comprising LSA and nonoxynol-9, to the sperm of mammals because of the reasonable expectancy of successfully inhibiting fertilization and protecting against sexually transmitted diseases.

Response to Arguments

Applicants argue that there is no motivation to combine LSA and nonoxynol-9 because while LSA inhibits acrosome reaction of sperm, it does not kill or immobilize sperm as defined by the term "spermicide." This is found unpersuasive because a person of ordinary skill in the art would recognize both LSA and nonoxynol-9 as

compounds that inhibit fertilization. Although the mechanism at which to arrive at the end result may vary, ultimately inhibition of fertilization will occur.

"It is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... The idea of combining them flows logically from their having been individually taught in the prior art." *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yong S. Chong whose telephone number is (571)-272-8513. The examiner can normally be reached on M-F, 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SREENI PADMANABHAN can be reached on (571)-272-0629. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YSC

SHENGJUN WANG
PRIMARY EXAMINER